Hello Ms. Kathryn:

In my e-mail message of yesterday, August 26, 2008, I requested your cooperation in obtaining a complete description of the perforation intervals proposed by TexCom for its WDW-410 well. I reach out to you for assistance, once again, hoping to be able to gain, as quickly as possible, a better understanding of what went into the review of this application and the resulting recommendations. As we understand it, TCEQ will be holding a hearing on this application on September 24, 2008, therefore, we do not have a whole lot of time left. Please provide, if you can, your comments/clarifications on my observations in the following areas:

About the Flow Model: Figure VII-2 in the application document is a structural map illustrating the approximate depths to the surface of the shale bed immediately below the Middle Cockfield. Based on a 210 feet Ground Elevation, per the WDW-410 well log header, this surface occurs at a measured depth of nearly 6010 feet in this well. The portion of the graph where the contour lines come into close proximity indicates that this graph also depicts a fault's structural surface, which can be seen intersecting the above referenced shale bed at about -5550 feet at its deepest point to the north, and at -5400 feet at its shallowest point to the south.

These facts suggest that the north block in the reservoir is the fault's downthrown block (or, conversely, that the south block is the "up-thrown" block), and that the fault's throw is about 150 feet, which is consistent with the magnitude of the fault's throw discussed in the application package. These facts also indicate that the fault's structural plane is not vertical, but that it leans towards the south.

With the above in mind, one then must conclude that, at the fault, the top of the Lower Cockfield in the reservoir's downthrown block (the north block) lies at approximately 180 feet below the base of the portion of the Middle Cockfield found in the reservoir's south block. It can also be said that the portion of the Lower Cockfield in the north block is in contact with the Cockfield Shale at the fault, not the Middle Cockfield as indicated in the application document's flow model (Figure VII-1, attached). Under this scenario, it would appear that fluids moving south within the Lower Cockfield might not flow beyond the fault's plane, unless this happens to be a transmissive fault as opposed to being a sealing fault.

Figure VII-1 basically shows that the fluids flowing within Zone 1 (the Lower Cockfield) move "past the fault" (language in Table VII-2) into Zone 2 (the Middle Cockfield) with no reference to the fact that these two zones are actually found at different depths, per Figure VII-2 in the application document. As far as I can tell, this document does not appear to have documentation that would show that this fault is transmissive.

About Porosities and Permeabilities: The porosity values attributed to the Middle Cockfield and the Lower Cockfield in Table VII-2 of the application document appear to be within the ballpark, even though details on the exact perforated intervals are as yet unknown to us. However, based on the operator provided porosity-permeability crossplot (attached), the estimated permeability for a porosity of 27.6 % is 225 md (Middle Cockfield), and the estimated permeability for a porosity of 24.0 % is 71 md (Lower Cockfield). It can be said that the latter permeability value, 71 md, is in close agreement with the permeability value of 80 md that was estimated from the fall-off test in the Lower Cockfield. The fact that the modeling work discussed in the application document was based on an assumed permeability of 500 md for both, the Middle and the Lower Cockfield (Section VII.B.4) is an issue not to be overlooked.

As previously stated, the above discussion is part of our ongoing efforts to better understand the reservoir modeling work (per the terminology in the Contested Case Hearing transcripts) that led to the conclusion that the radius of endangering influence is zero feet, as reported by the operator (page VII-19 of the application document), or that it is less than 150 feet as you stated at the hearing (per transcripts, Vol. 5, page 1162).

I will appreciate any feedback that may help validate/clarify/revise/refute the points that I have brought up at this time. I would be most interested in knowing if in your computations you took into consideration the presence of a no-flow barrier located at a known distance from the proposed injection well, and if you didn't, why. I would also appreciate your comments on how you justified each input parameter used in your model runs and in any sensitivity analysis that you may have performed. Please let me know about discussions that may have led to conclusions regarding the accuracy of Figure VII-2 (I apologize for not being able to cover every corner of the hearing transcripts as of yet).

Thank you for your assistance with this matter. I look forward to hearing from you. Best regards,

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